

Batch #417R  
6/11/99 07/12/91Serial Number: 09/147 919CRF Processing Date: 6/11/99  
Edited by: JL  
Verified by: JL (STIC staff)

- Changed a file from non-ASCII to ASCII
- Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- Edited a format error in the Current Application Data section, specifically:

ENTERED

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was  the prior application data; or  other \_\_\_\_\_.

- Added the mandatory heading and subheadings for "Current Application Data".
- Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- Changed the spelling of a mandatory field (the headings or subheadings), specifically:
- Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
- Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
- Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- Inserted colons after headings/subheadings. Headings edited included:
- Deleted extra, invalid, headings used by an applicant, specifically:
- Deleted:  non-ASCII "garbage" at the beginning/end of files;  secretary initials/filename at end of file;  page numbers throughout text;  other invalid text, such as \_\_\_\_\_.
- Inserted mandatory headings, specifically:
- Corrected an obvious error in the response, specifically:
- Edited identifiers where upper case is used but lower case is required, or vice versa.
- Corrected an error in the Number of Sequences field, specifically:
- A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected:
- Other:
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**INPUT SET: S32192.raw**

This Raw Listing contains the General Information Section and up to the first 5 pages.

1                           **SEQUENCE LISTING**  
23     (1)    General Information:  
4

## 5       (i) APPLICANT:

6       (A) NAME: Bavarian Nordic AS  
7       (B) STREET: Naverland 2  
8       (C) CITY: Glostrup  
9       (E) COUNTRY: Denmark  
10      (F) POSTAL CODE (ZIP): 2600  
11      (G) TELEPHONE: 0045 43 438 444

**ENTERED**

12  
13       (A) NAME: GSF Forschungszentrum fuer Umwelt und  
14                   Gesundheit GmbH  
15       (B) STREET: Ingolstaedter Landstr. 1  
16       (C) CITY: Neuherberg  
17       (E) COUNTRY: Germany  
18       (F) POSTAL CODE (ZIP): 85758

19  
20       (ii) TITLE OF INVENTION: Recombinant MVA Virus Expressing Dengue Virus  
21                   Antigens, and The Use Thereof in Vaccines

22  
23       (iii) NUMBER OF SEQUENCES: 8

24  
25       (v) COMPUTER READABLE FORM:

26       (A) MEDIUM TYPE: Floppy disk  
27       (B) COMPUTER: IBM PC compatible  
28       (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
29       (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)

30  
31       (vi) CURRENT APPLICATION DATA:

32       (A) APPLICATION NUMBER:  
33       (B) FILING DATE:

34  
35       (vii) PRIOR APPLICATION DATA:

36       (A) APPLICATION NUMBER: DK 1035/96  
37       (B) FILING DATE:

38  
39       (2) INFORMATION FOR SEQ ID NO: 1:

40  
41       (i) SEQUENCE CHARACTERISTICS:

42       (A) LENGTH: 33 base pairs  
43       (B) TYPE: nucleic acid  
44       (C) STRANDEDNESS: single  
45       (D) TOPOLOGY: linear

46

**RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/147,919**DATE: 06/14/1999  
TIME: 16:45:38**INPUT SET: S32192.raw**

47       (ii) MOLECULE TYPE: other nucleic acid  
48           (A) DESCRIPTION: /desc = "primer"  
49  
50       (iii) HYPOTHETICAL: YES  
51  
52       (iv) ANTI-SENSE: NO  
53  
54  
55  
56  
57       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
58

59       CAGCAGGGTA CCCTCATCGT ACAGGACGTT CTC  
60  
61       (2) INFORMATION FOR SEQ ID NO: 2:

33

62  
63       (i) SEQUENCE CHARACTERISTICS:  
64           (A) LENGTH: 42 base pairs  
65           (B) TYPE: nucleic acid  
66           (C) STRANDEDNESS: single  
67           (D) TOPOLOGY: linear  
68  
69       (ii) MOLECULE TYPE: other nucleic acid  
70           (A) DESCRIPTION: /desc = "primer"  
71  
72  
73  
74

75       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
76

42

77       CAGCAGCCCG GGTATTGAT GATTATTTT AACAAAATAA CA  
78  
79       (2) INFORMATION FOR SEQ ID NO: 3:

80  
81       (i) SEQUENCE CHARACTERISTICS:  
82           (A) LENGTH: 36 base pairs  
83           (B) TYPE: nucleic acid  
84           (C) STRANDEDNESS: single  
85           (D) TOPOLOGY: linear  
86  
87       (ii) MOLECULE TYPE: other nucleic acid  
88           (A) DESCRIPTION: /desc = "primer"  
89  
90       (iii) HYPOTHETICAL: YES  
91  
92       (iv) ANTI-SENSE: NO  
93  
94  
95  
96

97       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:  
98  
99       CAGCAGCTGC AGGAATCATC CATTCCACTG AATAGC

36

**RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/147,919**DATE: 06/14/1999  
TIME: 16:45:39**INPUT SET: S32192.raw**

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101 (2) INFORMATION FOR SEQ ID NO: 4:  
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103 (i) SEQUENCE CHARACTERISTICS:  
104 (A) LENGTH: 36 base pairs  
105 (B) TYPE: nucleic acid  
106 (C) STRANDEDNESS: single  
107 (D) TOPOLOGY: linear  
108  
109 (ii) MOLECULE TYPE: other nucleic acid  
110 (A) DESCRIPTION: /desc = "primer"  
111  
112  
113  
114  
115 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:  
116  
117 CAGCAGGCAT GCCGACGAAC AAGGAACGT AGCAGA 36  
118  
119 (2) INFORMATION FOR SEQ ID NO: 5:  
120  
121 (i) SEQUENCE CHARACTERISTICS:  
122 (A) LENGTH: 33 base pairs  
123 (B) TYPE: nucleic acid  
124 (C) STRANDEDNESS: single  
125 (D) TOPOLOGY: linear  
126  
127 (ii) MOLECULE TYPE: other nucleic acid  
128 (A) DESCRIPTION: /desc = "primer"  
129  
130  
131  
132  
133 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:  
134  
135 CAGCAGGTCTG ACCCCGACCG CCTTACTGCC GCC 33  
136  
137 (2) INFORMATION FOR SEQ ID NO: 6:  
138  
139 (i) SEQUENCE CHARACTERISTICS:  
140 (A) LENGTH: 33 base pairs  
141 (B) TYPE: nucleic acid  
142 (C) STRANDEDNESS: single  
143 (D) TOPOLOGY: linear  
144  
145 (ii) MOLECULE TYPE: other nucleic acid  
146 (A) DESCRIPTION: /desc = "primer"  
147  
148  
149  
150  
151 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:  
152

**RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/147,919**DATE: 06/14/1999  
TIME: 16:45:39**INPUT SET: S32192.raw**

33

153 GGGGGGCTGC AGATGGTAGC GACCGGGCGCT CAG

154

155 (2) INFORMATION FOR SEQ ID NO: 7:

156

157 (i) SEQUENCE CHARACTERISTICS:

- 158 (A) LENGTH: 36 base pairs
- 159 (B) TYPE: nucleic acid
- 160 (C) STRANDEDNESS: single
- 161 (D) TOPOLOGY: linear

162

163 (ii) MOLECULE TYPE: other nucleic acid

- 164 (A) DESCRIPTION: /desc = "primer"

165

166

167

168

169 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

170

171 CAGCAGCCCG GGATGGCAGC AATCCTGGCA TACACC

36

172

173 (2) INFORMATION FOR SEQ ID NO: 8:

174

175 (i) SEQUENCE CHARACTERISTICS:

- 176 (A) LENGTH: 39 base pairs
- 177 (B) TYPE: nucleic acid
- 178 (C) STRANDEDNESS: single
- 179 (D) TOPOLOGY: linear

180

181 (ii) MOLECULE TYPE: other nucleic acid

- 182 (A) DESCRIPTION: /desc = "primer"

183

184

185

186

187 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

188

189 CAGCAGCCCG GGTCACTGTA GTTTGTCCAT CCTCAGCCT

39

190

PAGE: 1

**SEQUENCE VERIFICATION REPORT  
PATENT APPLICATION US/09/147,919**

DATE: 06/14/1999  
TIME: 16:45:39

**INPUT SET: S32192.raw**

Line	Error	Original Text
5	Mandatory Value Not Present	(i) APPLICANT:
6	Unknown or Misplaced Identifier	(A) NAME: Bavarian Nordic AS
7	Unknown or Misplaced Identifier	(B) STREET: Naverland 2
8	Unknown or Misplaced Identifier	(C) CITY: Glostrup
9	Unknown or Misplaced Identifier	(E) COUNTRY: Denmark
10	Unknown or Misplaced Identifier	(F) POSTAL CODE (ZIP): 2600
11	Unknown or Misplaced Identifier	(G) TELEPHONE: oo45 43 438 444
13	Unknown or Misplaced Identifier	(A) NAME: GSF Forschungszentrum fuer Umwelt und
15	Unknown or Misplaced Identifier	(B) STREET: Ingolstaedter Landstr. 1
16	Unknown or Misplaced Identifier	(C) CITY: Neuherberg
17	Unknown or Misplaced Identifier	(E) COUNTRY: Germany
18	Unknown or Misplaced Identifier	(F) POSTAL CODE (ZIP): 85758

PAGE: 1

**RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/147,919**

DATE: 06/11/1999  
TIME: 10:23:23

INPUT SET: S32192.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

1                   SEQUENCE LISTING  
2

## 3       (1)   General Information:

4

## 5       (i) APPLICANT:

- 6       (A) NAME: Bavarian Nordic AS
- 7       (B) STREET: Naverland 2
- 8       (C) CITY: Glostrup
- 9       (E) COUNTRY: Denmark
- 10      (F) POSTAL CODE (ZIP): 2600
- 11      (G) TELEPHONE: 0045 43 438 444

Does Not Comply  
Corrected Diskette Needed

- 12
- 13      (A) NAME: GSF Forschungszentrum fuer Umwelt und  
14            Gesundheit GmbH
- 15      (B) STREET: Ingolstaedter Landstr. 1
- 16      (C) CITY: Neuherberg
- 17      (E) COUNTRY: Germany
- 18      (F) POSTAL CODE (ZIP): 85758

- 19
- 20      (ii) TITLE OF INVENTION: Recombinant MVA Virus Expressing Dengue Virus  
21            Antigens, and The Use Thereof in Vaccines

- 22
- 23      (iii) NUMBER OF SEQUENCES: 8

- 24
- 25      (iv) COMPUTER READABLE FORM:

- 26       (A) MEDIUM TYPE: Floppy disk
- 27       (B) COMPUTER: IBM PC compatible
- 28       (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- 29       (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)

- 30
- 31      (v) CURRENT APPLICATION DATA:

- 32      → (A) APPLICATION NUMBER: DK 1035/96

- 33
- 34      (2) INFORMATION FOR SEQ ID NO: 1:

(VII) Prior APP DATA!

- 35
- 36      (i) SEQUENCE CHARACTERISTICS:

- 37       (A) LENGTH: 33 base pairs
- 38       (B) TYPE: nucleic acid
- 39       (C) STRANDEDNESS: single
- 40       (D) TOPOLOGY: linear

- 41
- 42      (ii) MOLECULE TYPE: other nucleic acid

- 43       (A) DESCRIPTION: /desc = "primer"

- 44
- 45      (iii) HYPOTHETICAL: YES

- 46

**INPUT SET: S32192.raw**

47 (iv) ANTI-SENSE: NO  
48  
49  
50  
51  
52 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
53  
54 CAGCAGGGTA CCCTCATCGT ACAGGACGTT CTC 33  
55  
56 (2) INFORMATION FOR SEQ ID NO: 2:  
57  
58 (i) SEQUENCE CHARACTERISTICS:  
59 (A) LENGTH: 42 base pairs  
60 (B) TYPE: nucleic acid  
61 (C) STRANDEDNESS: single  
62 (D) TOPOLOGY: linear  
63  
64 (ii) MOLECULE TYPE: other nucleic acid  
65 (A) DESCRIPTION: /desc = "primer"  
66  
67  
68  
69  
70 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:  
71  
72 CAGCAGCCCC GGTATTCGAT GATTATTTT AACAAAATAA CA 42  
73  
74 (2) INFORMATION FOR SEQ ID NO: 3:  
75  
76 (i) SEQUENCE CHARACTERISTICS:  
77 (A) LENGTH: 36 base pairs  
78 (B) TYPE: nucleic acid  
79 (C) STRANDEDNESS: single  
80 (D) TOPOLOGY: linear  
81  
82 (ii) MOLECULE TYPE: other nucleic acid  
83 (A) DESCRIPTION: /desc = "primer"  
84  
85 (iii) HYPOTHETICAL: YES  
86  
87 (iv) ANTI-SENSE: NO  
88  
89  
90  
91  
92 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:  
93  
94 CAGCAGCTGC AGGAATCATC CATTCCACTG AATAGC 36  
95  
96 (2) INFORMATION FOR SEQ ID NO: 4:  
97  
98 (i) SEQUENCE CHARACTERISTICS:  
99 (A) LENGTH: 36 base pairs

**RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/147,919**DATE: 06/11/1999  
TIME: 10:23:24**INPUT SET: S32192.raw**

100                   (B) TYPE: nucleic acid  
101                   (C) STRANDEDNESS: single  
102                   (D) TOPOLOGY: linear  
103  
104               (ii) MOLECULE TYPE: other nucleic acid  
105               (A) DESCRIPTION: /desc = "primer"  
106  
107  
108  
109  
110               (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:  
111  
112 CAGCAGGCAT GCCGACGAAC AAGGAACGT AGCAGA                   36  
113  
114 (2) INFORMATION FOR SEQ ID NO: 5:  
115  
116               (i) SEQUENCE CHARACTERISTICS:  
117               (A) LENGTH: 33 base pairs  
118               (B) TYPE: nucleic acid  
119               (C) STRANDEDNESS: single  
120               (D) TOPOLOGY: linear  
121  
122               (ii) MOLECULE TYPE: other nucleic acid  
123               (A) DESCRIPTION: /desc = "primer"  
124  
125  
126  
127  
128               (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:  
129  
130 CAGCAGGTCG ACCCCGACCG CCTTACTGCC GCC                   33  
131  
132 (2) INFORMATION FOR SEQ ID NO: 6:  
133  
134               (i) SEQUENCE CHARACTERISTICS:  
135               (A) LENGTH: 33 base pairs  
136               (B) TYPE: nucleic acid  
137               (C) STRANDEDNESS: single  
138               (D) TOPOLOGY: linear  
139  
140               (ii) MOLECULE TYPE: other nucleic acid  
141               (A) DESCRIPTION: /desc = "primer"  
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143  
144  
145  
146               (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:  
147  
148 GGGGGGCTGC AGATGGTAGC GACCGGCGCT CAG                   33  
149  
150 (2) INFORMATION FOR SEQ ID NO: 7:  
151  
152               (i) SEQUENCE CHARACTERISTICS:

**RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/147,919**DATE: 06/11/1999  
TIME: 10:23:24**INPUT SET: S32192.raw**

153           (A) LENGTH: 36 base pairs  
154           (B) TYPE: nucleic acid  
155           (C) STRANDEDNESS: single  
156           (D) TOPOLOGY: linear  
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158        (ii) MOLECULE TYPE: other nucleic acid  
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164        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:  
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166 CAGCAGCCCCG GGATGGCAGC AATCCTGGCA TACACC           36  
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168        (2) INFORMATION FOR SEQ ID NO: 8:  
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170           (i) SEQUENCE CHARACTERISTICS:  
171            (A) LENGTH: 39 base pairs  
172            (B) TYPE: nucleic acid  
173            (C) STRANDEDNESS: single  
174            (D) TOPOLOGY: linear  
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176        (ii) MOLECULE TYPE: other nucleic acid  
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182        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:  
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PAGE: 1

**SEQUENCE VERIFICATION REPORT  
PATENT APPLICATION US/09/147,919**

DATE: 06/11/1999  
TIME: 10:23:24

**INPUT SET: S32192.raw**

Line	Error	Original Text
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6	Unknown or Misplaced Identifier	(A) NAME: Bavarian Nordic AS
7	Unknown or Misplaced Identifier	(B) STREET: Naverland 2
8	Unknown or Misplaced Identifier	(C) CITY: Glostrup
9	Unknown or Misplaced Identifier	(E) COUNTRY: Denmark
10	Unknown or Misplaced Identifier	(F) POSTAL CODE (ZIP): 2600
11	Unknown or Misplaced Identifier	(G) TELEPHONE: oo45 43 438 444
13	Unknown or Misplaced Identifier	(A) NAME: GSF Forschungszentrum fuer Umwelt und
15	Unknown or Misplaced Identifier	(B) STREET: Ingolstaedter Landstr. 1
16	Unknown or Misplaced Identifier	(C) CITY: Neuherberg
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